

City of Sunnyvale
Ten Year Project Costs
by Project Category and Type

Project Number	Project Name	Prior Years Actual	Revised Budget 2004-05	Plan 2005-06	Plan 2006-07	Plan 2007-08	Plan 2008-09	Plan 2009-10	Plan 2010-11	Plan 2011-12	Plan 2012-13	Plan 2013-14	Plan 2014-15	Ten Year Plan Total	Project Grand Total
Category: Special Type: Sanitary Sewer															
802951	WPCP Records Update	0	21,016	0	0	0	0	0	0	0	0	0	0	0	21,016
805500	WPCP NPDES Requirements	2,490,975	144,234	0	0	0	0	0	0	0	0	0	0	0	2,635,209
819550	Laboratory Information Management System	33,128	28,872	0	0	0	0	0	0	0	0	0	0	0	62,000
822530	Regulatory Compliance - Air/Emission Standards Requirements	173	48,712	0	0	0	0	0	0	0	0	0	0	0	48,885
822560	Energy Use Audit-Hot Water Loop Replacement	3,443	371,557	0	0	0	0	0	0	0	0	0	0	0	375,000
823140	Structural and Infrastructure Assessment at WPCP	33,048	96,373	0	0	0	0	0	0	0	0	0	0	0	129,421
823220	Wastewater Data/Process/Service Assessment Studies	27,031	354,244	0	0	0	0	0	0	0	0	0	0	0	381,275
824340	Wastewater Cost of Service Study	0	42,440	0	0	0	0	51,922	0	0	0	0	57,803	109,725	152,165
825100	Solids Handling Safety and Efficiency Improvements - Phase I	0	0	250,000	0	0	0	0	0	0	0	0	0	250,000	250,000
825960	SCVURPPP Contracting and Fiscal Agent	0	0	47,527	48,478	49,447	50,436	51,445	52,474	53,523	54,594	55,685	56,799	520,408	520,408
Total		2,587,798	1,107,448	297,527	48,478	49,447	50,436	103,367	52,474	53,523	54,594	55,685	114,602	880,133	4,575,379

Note: Projects with \$0 Grand Total have budgets in the second ten years of the Twenty Year Plan.

Project Information Sheet

Project: 802951 WPCP Records Update

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1999-00	Phase:	Planning	Project Manager:	Lorrie Gervin
Planned Completion Year:	2004-05	% Complete:	n/a	Project Coordinator:	Dan Hammons
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

The Water Pollution Control Plant drawings and specifications are severely outdated and incomplete. Few electronic records have been kept up to date. This project will organize, classify and digitize existing records and identify methods and procedures to keep them up to date. The use of Computer-Aided Design (CAD) technology or similar software will be appropriate.

Service Level

Staff time spent performing research should decrease. The current time spent could be used in record maintenance.

Issues

Combine with # 823220 scope / statement of need.

Close this project as of FY 04/05.

Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
Project Costs	0	21,016	0	0	0	0	0	0	0	0	0	0	0	21,016
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		21,016	0	0	0	0	0	0	0	0	0	0	0	
Total	0	21,016	0	0	0	0	0	0	0	0	0	0	0	21,016
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 805500 WPCP NPDES Requirements

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1998-99	Phase:	Ongoing	Project Manager:	Lorrie Gervin
Planned Completion Year:	Ongoing	% Complete:	100	Project Coordinator:	none
Origin:	Board/Commission			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

This project is funded for multiple years to meet mandated requirements of Regional Water Quality Control Board (RWQCB) and to provide process engineering expertise at the Water Pollution Control Plant (WPCP). The plant's National Pollution Discharge Elimination System (NPDES) permit application will be prepared FY 2005/2006 and 2006/2007 and negotiated. There is every reason to believe that the next permit will have similar study requirements as the previous two permits.

Service Level

no service level effect

Issues

The Contract is now funded out of operating expenditures in activity # 342089 - WPCP NPDES Requirements.

Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
Project Costs	2,490,975	144,234	0	0	0	0	0	0	0	0	0	0	0	2,635,209
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Total	2,490,975	144,234	0	0	0	0	0	0	0	0	0	0	0	2,635,209
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 819550 Laboratory Information Management System

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1997-98	Phase:	Completed	Project Manager:	Lorrie Gervin
Planned Completion Year:	2003-04	% Complete:	100	Project Coordinator:	Dave Grabiec
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

This project is to study the feasibility of implementing a laboratory information management system. The pretreatment program was replaced in 2002. The next phase will be the acquisition of a laboratory information system for electronic data submittal to state regulatory agencies.

Careful management of lab data is critical to verify and report on regulatory compliance. Part of the lab data management system utilizes outdated technology and needs replacement.

Service Level

no service level effect

Issues

none

Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
Project Costs	33,128	28,872	0	0	0	0	0	0	0	0	0	0	0	62,000
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		28,872	0	0	0	0	0	0	0	0	0	0	0	
Total	33,128	28,872	0	0	0	0	0	0	0	0	0	0	0	62,000
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 822530 Regulatory Compliance - Air/Emission Standards Requirements

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Implementation	Project Manager:	Lorrie Gervin
Planned Completion Year:	2007-08	% Complete:	100	Project Coordinator:	Kristy McCumby
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

This project funds the re-issuance of the Water Pollution Control Plant (WPCP) Title V air permit, using a qualified consultant to review all regulatory requirements and prepare the application package. Monitoring and record keeping requirements will be established and implemented, as needed, based on new permit requirements. Operating costs include air monitoring for engine emissions and other testing, as required in the permit.

Service Level

Compliance with federal, state and local air regulators.

Issues

Actual costs may vary as air regulations are issued by the Bay Area Air Quality Management District and Environmental Protection Agency.

Costs moved to Operating.

Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
Project Costs	173	48,712	0	0	0	0	0	0	0	0	0	0	0	48,885
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		48,712	0	0	0	0	0	0	0	0	0	0	0	
Total	173	48,712	0	0	0	0	0	0	0	0	0	0	0	48,885
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 822560 Energy Use Audit-Hot Water Loop Replacement

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Ongoing	Project Manager:	Hira Raina
Planned Completion Year:	2004-05	% Complete:	n/a	Project Coordinator:	Dan Hammons
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

The Water Pollution Control Plant (WPCP) generates electric power from methane gas produced at the landfill and in the water and wastewater treatment process. A by-product of power generation is heat, which is transferred via a hot water loop to other areas of the WPCP to heat buildings and for other uses. The hot water loop is nearing the end of its useful life, with expensive replacement costs already incurred for just a small portion of the system. The high cost of replacement dictated exploring options other than just replacing with a similar system.

This project will provide a comprehensive evaluation of how heat is generated, utilized, and dissipated throughout the WPCP. It will determine whether it would be more cost-effective to replace the hot water loop in kind or to construct a different system for heat dissipation for the engines and heating of the buildings. The project will also include preliminary engineering design work which will yield detailed information regarding the scope and anticipated construction costs for the preferred alternative. This information will be used to develop a new construction project for the identified alternative which will be submitted as part of the next CIP budget cycle.

Service Level

none

Issues

NOTE: \$300,000 budgeted for FY 04-05 to be carried over to FY 05-06.

Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
Project Costs	3,443	371,557	0	0	0	0	0	0	0	0	0	0	0	375,000
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		371,557	0	0	0	0	0	0	0	0	0	0	0	
Total	3,443	371,557	0	0	0	0	0	0	0	0	0	0	0	375,000
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 823140 Structural and Infrastructure Assessment at WPCP

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Implementation	Project Manager:	Lorrie Gervin
Planned Completion Year:	2003-04	% Complete:	50	Project Coordinator:	none
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

The infrastructure needs of the Water Pollution Control Plant (WPCP) are not yet fully funded. This project provides an inventory of infrastructure as well as condition assessment to determine remaining useful life and replacement costs and to identify immediate structural rehabilitation needs.

Service Level

no service level effect

Issues

none

Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
Project Costs	33,048	96,373	0	0	0	0	0	0	0	0	0	0	0	129,421
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		96,373	0	0	0	0	0	0	0	0	0	0	0	
Total	33,048	96,373	0	0	0	0	0	0	0	0	0	0	0	129,421
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 823220 Wastewater Data/Process/Service Assessment Studies

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Ongoing	Project Manager:	Lorrie Gervin
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	none
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

This project will fund various wastewater studies at the Water Pollution Control Plant (WPCP) over a ten-year period. These studies include the following:

WPCP Data Records Management - The WPCP data management systems and Support Services reporting needs, shall be addressed. Consideration of long-term maintenance of the system, including upgrade requirements and scheduling will, be part of the project.

Plant Process Assessment - This project involves a process engineering evaluation to examine WPCP treatment processes for sustainability, cost-effectiveness, and efficiency.

Laboratory Service Study/Market Analysis - Environmental lab service enhancements and cost efficiencies can be made by increasing the lab's ability to incorporate replacement equipment, methods, and procedures. These improvements will greatly enhance the lab's ability to bring in-house work currently contracted out when it is more cost effective to do so, and vice-versa.

Combine scope statement of need from 802951 to this project as well.

Service Level

no service level effect

Issues

none

Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
Project Costs	27,031	354,244	0	0	0	0	0	0	0	0	0	0	0	381,275
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		354,244	0	0	0	0	0	0	0	0	0	0	0	
Total	27,031	354,244	0	0	0	0	0	0	0	0	0	0	0	381,275
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 824340 Wastewater Cost of Service Study

Category:	Special	Type:	Sanitary Sewer	Department:	Finance
Origination Year:	2002-03	Phase:	Ongoing	Project Manager:	Tim Kirby
Planned Completion Year:	2004-05	% Complete:	n/a	Project Coordinator:	Kristy McCumby
Origin:	Staff			Interdependencies:	Public Works
Element:	3 Environmental Management	Goal:	3.3D	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

Every four years, the Utilities Division in the Department of Finance performs a cost of service study on the wastewater system to reallocate the costs of the City's wastewater services among the various customer classes, based on their use of each service. Staff works with a consultant to develop a cost of service model or update an existing model with current data. The study generates a cost of service for each customer class and recommends adjustments to the rate structure to ensure costs are recovered on an equitable basis from the different customer classes.

Service Level

none

Issues

none

Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
Project Costs	0	42,440	0	0	0	0	51,922	0	0	0	0	57,803	109,725	152,165
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		42,440	0	0	0	0	51,922	0	0	0	0	57,803	109,725	
Total	0	42,440	0	0	0	0	51,922	0	0	0	0	57,803	109,725	152,165
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 825100 Solids Handling Safety and Efficiency Improvements - Phase I

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2003-04	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2005-06	% Complete:	0	Project Coordinator:	John Addeo
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

A 50% increase in solids delivered to the Water Pollution Control Plant (WPCP) digesters and subsequently transferred to the dewatering facility will occur upon completion of project #812750, WPCP Energy Improvements, in FY 04/05. The Energy Improvement project is needed to offset the decline in landfill gas production by routing additional treatment plant solids to the digesters and thereby increasing methane production in the digesters. Routing additional solids to the digesters will also decrease solids to the ponds which then require expensive removal.

Handling this increased volume of solids will place added stress on the existing solids handling system and may lead to unsafe and dangerous conditions by overloading staff and equipment trying to meet process goals. Phase I of this project will be a review of mechanical and staffing needs to provide the safest and most cost-effective solids handling. It will result in recommendations for materials handling equipment and staffing to increase the throughput of solids from the dewatering filtration beds to the sludge drying area. Phase II of this project will be a construction contract for the implementation of the recommended solution. Phase II will be identified in a subsequent budget cycle when costs can be better defined. Construction costs will be a one-time expenditure. Operating cost increases may be needed but will be offset by savings in energy costs due to declining landfill gas production and costs for solids removal from the oxidation ponds. The expected life of new facilities is unknown at this time because this type of facility has not yet been identified.

Service Level

Service Delivery Plan (SDP) 34206 - Recycling and Reuse of Plant Process By-Products requires recovering the maximum amount of solids processed at dewatering for beneficial reuse.

Issues

No issues.

Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
Project Costs	0	0	250,000	0	0	0	0	0	0	0	0	0	250,000	250,000
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		0	250,000	0	0	0	0	0	0	0	0	0	250,000	
Total	0	0	250,000	0	0	0	0	0	0	0	0	0	250,000	250,000
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 825960 SCVURPPP Contracting and Fiscal Agent

Category:	Special	Type:	Sanitary Sewer	Department:	Finance
Origination Year:	2004-05	Phase:	Ongoing	Project Manager:	Lorrie Gervin
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Tim Kirby
Origin:	Staff			Interdependencies:	Public Works
Element:	3 Environmental Management	Goal:	3.4A	Fund:	455 Utilities
Sub-Element:	3.4 Surface Runoff	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

The City of Sunnyvale is one of 15 members of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). SCVURPPP was formed to implement the National Pollution Discharge Elimination Permit (NPDES) issued to the cities, county, and Santa Clara Valley Water District who discharge storm water to the San Francisco Bay. These 15 agencies have signed a Memorandum of Agreement (MOA) and pay annual assessments to cover the cost of programmatic activities related to implementing the NPDES Permit.

The MOA provides for the selection of one of the members as the Program's Contracting and Fiscal Agent. The City of Sunnyvale has been selected as the program's Contracting and Fiscal Agent. The Contracting and Fiscal Agent provides billing and payment services for SCVURPPP, and acts as the awarding authority for any contracts that the agency wishes to enter into. This project is fully funded by SCVURPPP Assessments.

Service Level

none

Issues

none

Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
Project Costs	0	0	47,527	48,478	49,447	50,436	51,445	52,474	53,523	54,594	55,685	56,799	520,408	520,408
Revenues														
Other Agencies-Reimbursement		0	47,527	48,478	49,447	50,436	51,445	52,474	53,523	54,594	55,685	56,799	520,408	
Total	0	0	47,527	48,478	49,447	50,436	51,445	52,474	53,523	54,594	55,685	56,799	520,408	520,408
Transfers-In														
Total														
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0